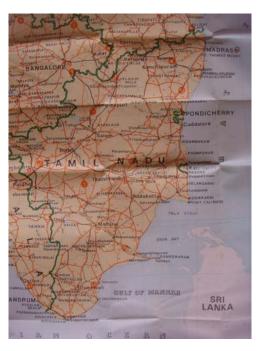




South Indian glimpses and cultural historical footprints

Impressions and experiences around the LOICZ SSC meeting in Chennai, India, March 2010

Report by Bernhard Glaeser and Marion Glaser, LOICZ SSC



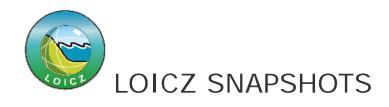
South India is different. One of our colleagues who came to Chennai for the first time summarized her impressions like this: Colors are bright, people are friendly, and the legume based vegetarian diet is both tasty and healthy. Unknowingly, our colleague referred to Tamil Nadu's cultural heritage, with Arian Hinduism as the dominant creed which merged with village gods and ancient proto-Tamil deities. The landscape and the cultural and political history formed what is now the modern society in the south Indian state of Tamil Nadu.

photo: Bernhard Glaeser

Historical aspects

The cultural and political history of Tamil Nadu (literally, land of the Tamilians) covers 20 to 30 centuries and is thus one of the oldest still existing in the world, comparable almost to that of China, with which there must have been contacts as early as the 2nd century BC. The Tamils are Dravidians, their origin being unclear. It is assumed that the Dravidians were the original Indian inhabitants, Proto-Indians, who were later pushed "down" to South India by the intruding Aryans from Central Asia. They developed a scientific grammar for their language about 1,500 years ago.

The Brahmin culture of the North and the Dravidian culture of the South were entirely different. They spoke different languages, adopted different religious practices, and were accustomed to different social values and structures. However, neither culture believed in intermarriage or dining together. These customs played a role in the



emergence of the Indian caste system. At the same time, they practiced social coexistence.

A fusion of the two cultures came about through three waves of Aryan migration to the South between the 4th century BC and the 6th century AD. While northern philosophy, mythology and the Sanskrit language influenced Dravidian patterns, the immigrants adopted southern patterns of living, accepted local deities in the Aryan mythology, and assimilated Dravidian words. The Sangam period (about 100 BC to 300 AD) marks the beginning of recorded Tamil history, it is considered to be the "golden age" of Tamil Nadu cultural history. Tamil poets praised the achievements of their kings. The Pandya dynasty ruled the southern part of the Tamil country, the Cholas ruled the North, and the Cheras ruled the western regions (now Kerala).

According to Sangam literature, society was geographically divided into mountainous, desert, pastoral, agricultural and coastal regions. No mention is made of the four traditional castes, namely, priest, warriors, merchants and farmers. Their food consisted of grains (rice, millet) served with meat, fish, roots and fruits. Vegetarian nutrition was not prevalent; it was popularized later by Jainas, Buddhists and "Brahmanas". Consumption of liquor was looked upon as an innocent pleasure. Premarital love was viewed as something prompted by nature or god. There was faith in astrology. The status of women was one of subordination to men. Slavery was common.

Traditional culture and the social system remained fairly intact throughout centuries, conquests and the maze of dynasties up to the 17th century. This includes the caste system although the number of subcastes and communities was constantly growing. Social change came about through British colonial administration and legislation: After 1801, British authorities unified and centralized the Tamil country. Universities were established, the education of women was introduced, marriages before the age of 14 and *sati* (women dying on their husbands' funeral pyres) were abolished.

The reforms to establish equality between communities and castes struck at Hindu social and religious traditions. Originally, Hindu rational philosophic truths were applicable to all of humanity. The pursuit of *dharma*, doing one's duty, being of selfless service to others, was independent of caste affiliation. Later, physical rites became more important than their underlying concepts. According to P. Kalyanasundaram, many Hindus may not understand what they are performing and why in the rituals and lost Hindu philosophy which emphasized equality and love among all beings (professor and caste Hindu, Brahmin: various personal communications with B. Glaeser in different years).

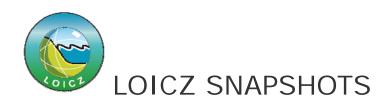




Photo: Bernhard Glaeser:

Religious tolerance: Devotional picture uniting Islam, Hinduism, Christianity.

After independence in 1950, the states within the Indian Union were reorganized on a linguistic basis. The new Madras state, with Tamil as the main language, was born in 1956 and renamed Tamil Nadu in 1969.

Source: Bernhard Glaeser (first published in 1995). *Housing, sustainable development and the rural poor. A study of Tamil Nadu.* Sage Publications (New Delhi/Thousand Oaks/London), 432 pages.

Historic sites

Mahabalipuram, located 60 km south of Chennai (Madras), is one of the classical sites of Indian archaeology and included in the UNESCO's "World Heritage List". Mahabalipuram is a shining example of the Dravidian culture and of the ancient civilization of the Tamils. It was a flourishing seaport and trading center as early as in the 1st and 2nd century AD, visited among others by the ancient Greeks. The monuments and temples were designed during the 7th and 8th century by the Pallava dynasty who ruled over northern Tamil Nadu for about 400 years from the 6th century AD. Mahabalipuram was renamed Mamallapuram after king Mamallan Narasimha Pallavan who defeated the Chaluka king Pulakesin II in 642 AD.





Photo: The town of Mahabalipuram. Marion Glaser.

There are four types of sculptures available in India: Bas reliefs (sculptured scenes), cave temples, carved monoliths and masonry temples. Mahabalipuram's unique feature is that it hosts all four types. The 2004 tsunami did not touch the sites. The Shore Temple had been protected by stone walls even before that date. The LOICZ group visited most of the sites; we select a few in this report.

Arjuna's Penance is a massive piece of art, a monument which is 25 m long and 12 m high, which has been carved on the edge of a huge whale shaped rock. It might be the world's largest bas relief, a universe in stone, featuring Arjuna—the hero of the famous Indian epic Mahabharata—doing penance for obtaining a powerful weapon from Lord Shiva, and including more than 150 life like figures, such as gods and goddesses, sages, hunters, wild animals (serpent, lion, elephant, deer) and domestic animals (cat, mouse).





Photo: Bernhard Glaeser, Arjuna's Penance

In the middle of the monument, dividing it vertically into two halves, there is a narrow cleft supposedly representing the descent of the holy river Ganga from heaven to the earth: the Ganges, which originates from the Himalayans and runs through the north Indian plains. This feature seems to be telling us—as did the Greek philosopher Thales of Miletos (624-545 BC)—that water is the lifeline of any existence. It is eye-opening for interdisciplinary LOICZ coastal research and management to note that most civilizations in the world have originated on river banks or coasts.

Drinking water is a scarce commodity worldwide, including the city of Chennai which has experienced water shortage for a long time. So, perhaps, it is Bagiratha's penance depicted here, rather than Arjuna's, as some scholars claim? Bagiratha, the prince of the Solar dynasty, did penance for bringing the holy river Ganges to the earth, only to make the earth fertile. The Ganges rushed to the earth but its might was too strong for the earth to withstand, and Lord Shiva held out his thickly matted hair to hold the descending river and soften its journey. In Judaeo-Christian mythology, a comparable theme is the deluge. More recently, we have become afraid of sea level rise, tsunamis and hurricanes.

Adjacent to Arjuna's Penance lies the Pancha Paandava Cave, a cave temple which was scooped out of the rocks. Just south of it, the Krishna Mandapam (pillared hall) contains a scene, carved in stone, that shows a boy named Krishna (regarded as an incarnation of Lord Vishnu) who holds the mountain in his left hand and lifts it up like an umbrella to protect cow herds and village inhabitants against a storm which was



sent by God Indra to punish the villagers for some reason. They use the mountain as shelter, and the village was saved from destruction.



photo: Bernhard Glaeser, Pancha Paandava Cave.

A short bus ride away, we find the Five Rathas which are monoliths, free standing temples cut out of solid rock. They are known as *rathas*, which means chariots, because they resemble Indian temple carts. In temple architecture, the monolithic temples followed the cave temples, historically. There are four types of roofs for the five Rathas: the curvilinear roof (resembling a thatched hut), the hood shaped roof (resembling a country wagon), the pyramidal structure, and the arched roof (resembling the back of an elephant). These superstructures can be seen as the first specimen of temple towers (*vimanas*) which form a significant characteristic of South Indian temple architecture.



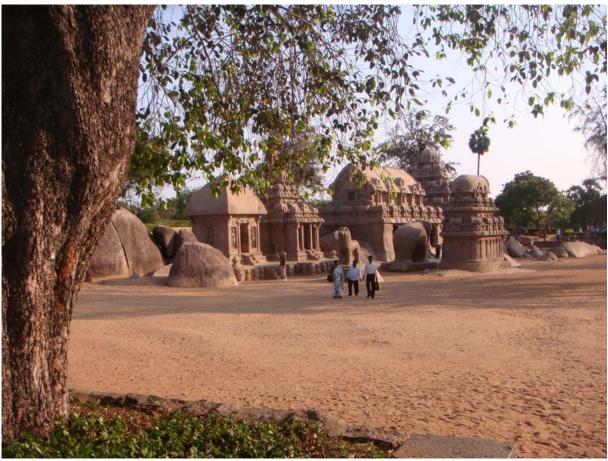


Photo: Bernhard Glaeser, Five Rathas

The Shore Temple nearby is a masonry temple (8th century), featuring the uniqueness of south Indian temples. This temple used to stand majestically in the sand right on the sea shore (BG still remembers this sight) for more than a thousand years, with the waves gently knocking against it until a wall of rocks was built around it, some years ago, to protect the temple. There had been seven temples on the beach. Only two temple towers remain. Archaeologists believe that the other temples were submerged by the sea.

Source: Srinivaas and J. Prabhakar (no date). *Mahabalipuram. A journey through a magic land.* Thanga thaamarai Publications (Chennai), 119 pages.





Photo: Bernhard Glaeser, Shore Temple

Fishery observations

Mahabalipuram has about 15,000 inhabitants, according to the 2001 census. The population consists of basically four communities (castes), according to informant R. Rajesh (citizen of Mahabalipuram, BSc in social work, water management volunteer) who provided the following information. The fishermen all belong to the same community. Apart from the fisher community, there are scheduled communities (masons), Christians and Muslims. Christians and Muslims perform different professions, they are not fishermen.

Beach observation on March 6, from 8 to 9:30 AM): A fishing crew returned home. Three boats had been 8 km offshore with a long Inshore drag net or Peruvalai to be operated by about 20 helpers onshore, dragging the net closer to the beach, including the fish catch in a *poche* (bag). The larger fish are for the market, the smaller for home consumption.







Photo: Ellen-Barbe Goldberg. Rapporteur Marion Glaser, SSC, talking to people digging for crabs on the beach of Mamallapuram.



Photo: Marion Glaser. Cooperative fishing (1). Finally on shore



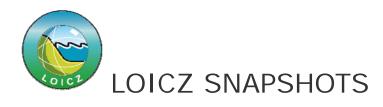


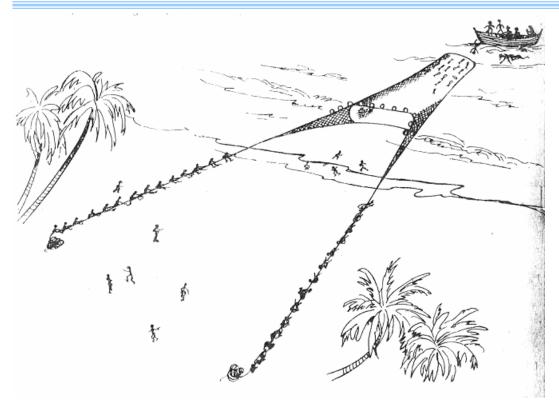
Photo: Marion Glaser. Cooperative fishing (2). Checking the catch.



Photo: Marion Glaser, Women take their share to the Market.

Women fill baskets with fish to be sold and negotiate a price. If they achieve a surplus they may keep it. The fisher families form a cooperative society and received the net from the government that subsidizes the fishers during monsoon (rainy season) when there is no catch. The fish caught look like sardines (sardinella spp), Indian mackerel (Ratrelliger kanagurta) and probably seer fish (*Scomberomorus guttatus*). (Sketch and information provided by S. Satheesh, senior research fellow, Institute for Ocean Management, Anna University, Chennai: March 8, 2010).





Inshore drag net (Kara Valai): sketch. S. Satheesh (IOM)

Narambi fishing village (near Pondicherry: LOCZ field trip on March 5, 2010) has a population of about 6,000 who settle along three main streets. Three people died during the 2004 tsunami. An amazing feature: There is internet in the village; they have an internet café. All children go to school, for 10 years. There is no school fee; books, a bicycle and two sets of school uniforms are free. The village is composed of 4-5 castes; it was 2-3 before the tsunami. 300-400 houses were built after the tsunami for the new people to settle here. The members of different castes do not intermarry but share resources and fish together.





photo: Bernhard Glaeser. Narambi fishing village



Photo: Bernhard Glaeser. Narambi: House interior.

Fish stocks appear to have been less abundant after the tsunami for no obvious scientific reason; there has been no change in the biodiversity of fish, according to our village informant (B. Baskar, fisherman, Narambi). Generally, fishing income decreased in spite of price increases. The reason is a (fishing) population increase which may also explain the alleged fish stock reduction: The total catch may have been stable but the individual share is less. Collaborative fishing (interviewer: S. Olsen) is performed as follows: One 70 foot boat and around 10 accompanying small boats go 30-40 km offshore to fish. The fishing methods used seem to be the same or resemble the bag net fishing observed in Mahabalipuram.



A concluding remark (following Prof. Srinivasalu) is that there have been fewer conflicts between communities after the tsunami. Fisher families are more prone to send their children to school to keep them away from the sea. Before, they had sent them out to fish instead.

Field trip to Pondicherry: Social and economic observations

Additional observations during the LOICZ field trip to Pondicherry and adjacent sites on March 5, 2010, included a silica (quartz sand) site and a salt extraction site in Ellamman Kovil, as well as a geological site in Thiruvakkarai featuring petrified wood. Pondicherry, about a two hour bus ride south of Chennai, is not part of the south Indian state of Tamil Nadu but a "union territory" governed directly by the union government in Delhi. Pondicherry used to be a French colony which is still reflected in the architectural style of colonial heritage office buildings or the colorful uniforms of the policemen. The field trip participants were accompanied by Dr Srinivasalu (professor of geology), Mr. Bani, (tour guide), Mr. P. Aravind Mukesh and Ms. M. Sowmya (both junior research fellows).

Silica (silicon dioxide) appears as quartz, sand flint and agate. In Ellamman Kovil, it is sieved by women to be used for glass production by Glass Containers Ltd., a private company nearby. The women working at the site visited are employed by the public sector, a government project. They earn 150 Rupees/day (3 US \$ or 2 €/day).



photo: Bernhard Glaeser: Women sieving quartz





Photo: Ellen-Barbe Goldberg. Women sieving quartz

The close by salt production site where 60 people work is owned privately. Some, not all of them, are harijans (untouchables below the caste system, called children of God or harijans by M. Gandhi). The women who work here earn 70 Rs/day. They do not own land, such as a vegetable garden, nor animals and hardly survive on a day to day basis. They need to buy all their food, including rice which is subsidized by the government and costs 2 Rs/kg. They claim that this rice is hardly edible and buy instead market rice which costs 25 Rs/kg. There is no social security safety net. Their concern is how to survive illnesses or to live when they get old. Government schools (12 years) are free, including books and one set of school uniforms (they need three). Drinking water supply is good and free. They need to pay, however, for electricity which amounts to 150 Rs/month (3 US \$ or 2 €/month). Couples come here to work together. Women earn 1,500 Rs/month (30 US \$ or 20 €/month). Men who do harder work (digging) earn 3,500 Rs/month (70 US \$ or 47 €/month). India's history of liberation from colonial rule still lives on in the fact that salt producers pay no tax to remember Mahatma Gandhi's famous salt march (making salt without paying tax) in defiance of British rule in India.





(photo: Barbe Goldberg. Salt extraction)



Photo: Ellen-Barbe Goldberg. Rapporteur Bernhard Glaeser, SSC, taking notes.

The fossil wood seen at the Thiruvakkarai National Park (Geological Survey of India) is 30-50 million years old and stems from the Miocene, a division of the Tertiary. The wood was covered by sediments with no access to oxygen when buried. Later, the soil eroded and exposed the petrified wood, hard as stone. The site is part of a shady grove of tamarind (*Tamarindus indica*) and banyan trees (*Ficus benghalensis*) that send out adventitious or aerial roots. The grove is protected by sculptures of small temple horses whereby new ones seem to replace "retired" ones regularly.



Conclusions

South India is culturally and ethnically different from the better known North. On the coast this is as manifest in the 2000 year plus stone masonry culture as in the elaborate and apparently successful cooperative structures in artisanal fisheries. An eight-day stay for the LOICZ SSC members showed clearly the rich research potentials in this part of the region.